AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): ~~Method~~ A method for reducing echo signals in telecommunications systems for the transmission of wanted acoustic signals~~, particularly human speech,~~ in which the presence of echo signals is detected and/or predicted and the detected and/or predicted echo signals are subsequently suppressed or reduced, comprising:

~~characterized in that~~

measuring and/or estimating continuously the power value of ~~the~~ a noise level N in ~~the~~ a currently used telecommunications channel ~~is continuously measured and/or estimated,~~ ; and

setting continuously and automatically a ~~that the~~ degree of reduction of the echo signals to be currently effected ~~is set continuously and automatically~~, in dependence on the ~~current~~ noise level N of the current channel, according to a predefined function h(N),

wherein the function h(N) increases as N increases.

2. (currently amended): ~~Method~~ The method according to Claim 1, ~~characterized in that the function h(N) increases as N increases,~~

wherein ~~whereby~~ $h(N << 0\ dB_m) = h_{min}$ = ~~const.~~ a constant, and

wherein $h(N \approx 0\ dB_m) = h_{max} > h_{min}$.

3. (currently amended): ~~Method~~ The method according to Claim 2, ~~characterized in that:~~

wherein $-50\ dB < h_{min} < -20\ dB$~~, preferably $-45\ dB \leq h_{min} \leq -35\ dB$~~, and

wherein $-20\ dB < h_{max} < 0\ dB$~~, preferably $-12\ dB \leq h_{max} \leq -6\ dB$~~.

4. (currently amended): ~~Method according to Claim 1, characterized in that~~ A method for reducing echo signals in telecommunications systems for the transmission of wanted acoustic signals in which the presence of echo signals is detected and/or predicted and the detected and/or predicted echo signals are subsequently suppressed or reduced, comprising:

measuring and/or estimating continuously the power value of a noise level N in a currently used telecommunications channel; and

setting continuously and automatically a degree of reduction of the echo signals to be currently effected, in dependence on the noise level N of the current channel, according to a predefined function h(N),

wherein the predefined function h(N) is a function k(S/N), which depends on ~~the~~ a signal-to-noise ratio, ~~i.e., the quotient~~ S/N, ~~from the~~of a power value of ~~the~~ a signal level S of the wanted signals to be transmitted and ~~the~~ a power value of the noise level N, or ~~that~~

wherein the predefined function h(N) is a function k'(N/S), which depends on the reciprocal, N/S, of the signal to noise ratio~~, of this quotient, preferably~~ or which depends on N/(N+S).

5. (currently amended): ~~Method~~ The method according to Claim 1, ~~characterized in that, in addition to the recognition and reduction of echo signals,~~ further comprising:

suppressing or reducing noise signals ~~are also suppressed or reduced~~.

6. (currently amended): ~~Method according to Claim 5, characterized in that~~ A method for reducing echo signals in telecommunications systems for the transmission of wanted acoustic signals in which the presence of echo signals is detected and/or predicted and the detected and/or predicted echo signals are subsequently suppressed or reduced, comprising:

measuring and/or estimating continuously the power value of a noise level N in a currently used telecommunications channel;

setting continuously and automatically a degree of reduction of the echo signals to be currently effected, in dependence on the noise level N of the current channel, according to a predefined function h(N);

suppressing or reducing noise signals; and

setting continuously and automatically ~~the~~ a degree of reduction of the noise level N to be currently effected ~~is set continuously and automatically~~, in dependence on the current noise level N, according to a second predefined function f(N), ~~or~~ g(S/N), ~~or~~ g'(N/S), ~~preferably~~ or g'(N/[N+S]).

7. (currently amended): ~~Method~~ The method according to Claim 6, ~~characterized in that, for N << 0 dBm,~~ wherein the functions f(N), g(S/N), g'(N/S) or g'([N/N+S]) ~~each~~

~~begin~~comprise, respectively, ~~with~~ a constant maximum value fmax, ~~or~~ gmax ~~or~~ and g'max, which are approximately equal to 0, for N << 0 dBm ~~≈ 0, fall to, in particular,~~

a settable ~~value, preferably a~~ minimum value fmin, ~~or~~ gmin ~~or~~ and g'min, respectively, in the range between N = -15 dBm to -10 dBm, ~~preferably for N or S/N ≈ -12 dBm,~~ and

~~then rise, to N ≈ 0 dBm, to~~ a constant value f0, ~~> fmin or~~ g0 ~~> gmin or~~ and g'0 ~~> g'min~~, respectively, for N approximately equal to 0 dBm,

wherein f0, g0, g'0 < 0, and

wherein f0 > fmin, g0 > gmin and g'0 >g'min.

8. (currently amended): Method according to Claim 7, characterized in that:

$f_0 \leq$ -5 dB, $g_0 \geq$ -10 dB, ~~preferably $f_0 \leq$ -6 dB, $g_0 \geq$ -8 dB, and~~

$f_{min} \leq$ -20 dB~~,~~ and $g_{min} \geq$ -30 dB~~, preferably f_{min}, g_{min} ≈ -25 dB~~.

9. (currently amended): ~~Method~~ The method according to Claim 1, ~~characterized in that the function h(N), at least partially, and preferably in all sub-sections, runs linearly~~wherein a portion of the function h(N) is linear with N.

10. (currently amended): ~~Method~~ The method according to Claim 4, ~~characterized in~~wherein a portion of the functions k(S/N) and k'(N/S or N/(N+S)), ~~at least partially, and preferably in all sub-sections, run linearly~~is linear with S/N and N/S or N/(N+S), respectively.

11. (withdrawn): Method according to Claim 1, characterized in that the function h(N) is constructed of polynomials and runs over N as an asymmetric bell-shaped curve.

12. (withdrawn): Method according to Claim 4, characterized in that the functions k(S/N) and k'(N/S) are constructed of polynomials and run over S/N and N/S respectively as asymmetric bell-shaped curves.

13. (withdrawn): Method according to Claim 1, characterized in that the function k(N) is selected so that the reduction of the noise level N is auditorially adapted according to the psychoacoustic mean values of the human auditory spectrum.

14. (withdrawn): Method according to Claim 4, characterized in that the functions k(S/N) and k'(N/S) are each respectively selected so that the reduction of the noise level N is auditorially adapted according to the psychoacoustic mean values of the human auditory spectrum.

15. (currently amended): ~~Method~~ The method according to Claim 1, ~~characterized in that~~wherein a speech pause detector (SPD) is used for recognition of the noise level N.

16. (currently amended): ~~Method~~ The method according to Claim 15, ~~characterized in that~~wherein the power value of the wanted acoustic signals ~~signal~~ to be transmitted is reduced during ~~the~~ speech pauses according to an exponential function.

17. (currently amended): ~~Method according to Claim 5, characterized in that~~ A method for reducing echo signals in telecommunications systems for the transmission of wanted acoustic signals in which the presence of echo signals is detected and/or predicted and the detected and/or predicted echo signals are subsequently suppressed or reduced, comprising:

measuring and/or estimating continuously the power value of a noise level N in a currently used telecommunications channel;

setting continuously and automatically a degree of reduction of the echo signals to be currently effected, in dependence on the noise level N of the current channel, according to a predefined function h(N);

suppressing or reducing noise signals; and

controlling separately the suppression or reduction of the noise signals and the reduction of the echo signals ~~are controlled separately~~.

18. (withdrawn): Method according to Claim 1, characterized in that an artificial noise signal is also added to the wanted signal during an echo reduction period.

19. (withdrawn): Method according to Claim 18, characterized in that the artificial noise signal comprises a signal sequence which is perceived psychoacoustically as an acoustically comfortable noise (= comfort noise).

20. (withdrawn): Method according to Claim 18, characterized in that the artificial noise signal comprises a noise signal recorded previously during the current telecommunications connection.

21. (new): The method of claim 3, wherein -45 dB $\leq h_{min} \leq$ -35 dB and -12 dB $\leq h_{max} \leq$ -6 dB.

22. (new): The method of claim 4, wherein the predefined function h(N) is a function k'(N/(N+S)).

23. (new): The method of claim 6, wherein the second predefined function is g'(N/(N+S)).

24. (new): The method of claim 7, wherein the settable minimum value is defined at N or S/N approximately equal to -12 dBm.

25. (new): The method of claim 8, wherein $f_0 \leq -6$ dB, $g_0 \geq -8$ dB and f_{min} and g_{min} are approximately equal to -25 dB.

26. (new): The method of claim 9, wherein all portions of the function h(N) are linear with N.

27. (new): The method of claim 10, wherein all portions of the functions k(S/N) and k'(N/S or N/(N+S)),are linear with S/N and N/S or N/(N+S), respectively.